

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/723,827	11/26/2003	Michael A. Kropp	57987US002	9277	
32692	7590 03/14/2006	90 03/14/2006		EXAMINER	
3M INNOV	ATIVE PROPERTIES (BERMAN,	BERMAN, SUSAN W		
PO BOX 3342	27 . AN 55133-3427		ART UNIT	PAPER NUMBER	
ST.TAGE, IV	114 33133-3421		1711		

DATE MAILED: 03/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/723,827	KROPP ET AL.		
Examiner	Art Unit		
Susan W. Berman	1711		

The MAILING DATE of this communication appears on the cover sheet with the corn	respondence address
THE REPLY FILED 21 February 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR A	ALLOWANCE.
1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Ap this application, applicant must timely file one of the following replies: (1) an amendment, affida places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in con a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must time periods:	vit, or other evidence, which npliance with 37 CFR 41.31; or (3)
a) The period for reply expiresmonths from the mailing date of the final rejection.	
b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in to no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this Advisory Action, or (2) the date set forth in the notice of the period for reply expire later than SIX MONTHS from the mailing date of this Advisory Action, or (2) the date set forth in the period for reply expire later than SIX MONTHS from the mailing date of this Advisory Action, or (2) the date set forth in the period for reply expires on	ate of the final rejection.
TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).	
Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(have been filed is the date for purposes of determining the period of extension and the corresponding amount of tunder 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply original set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL	he fee. The appropriate extension fee ly set in the final Office action; or (2) as
2. The Notice of Appeal was filed on A brief in compliance with 37 CFR 41.37 must be file filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to average a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(e)).	oid dismissal of the appeal. Since
AMENDMENTS	
3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, wi (a) They raise new issues that would require further consideration and/or search (see NOTE (b) They raise the issue of new matter (see NOTE below);	
(c) They are not deemed to place the application in better form for appeal by materially reduce appeal; and/or	cing or simplifying the issues for
(d) They present additional claims without canceling a corresponding number of finally reject	ed claims.
NOTE: (See 37 CFR 1.116 and 41.33(a)).	"
4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Comp	Dilant Amendment (PTOL-324).
5. Applicant's reply has overcome the following rejection(s):	and the standard and a second and the second
 Newly proposed or amended claim(s) would be allowable if submitted in a separate, tim non-allowable claim(s). 	nely filed amendment canceling the
7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows:	e entered and an explanation of
Claim(s) allowed: <u>16,17,19,21 and 23</u> .	
Claim(s) objected to: <u>11 and 12</u> . Claim(s) rejected: <u>1-10,12-15,18, 20, 22 and 24</u> .	
Claim(s) withdrawn from consideration:	
AFFIDAVIT OR OTHER EVIDENCE	
8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notic because applicant failed to provide a showing of good and sufficient reasons why the affidavit of was not earlier presented. See 37 CFR 1.116(e).	
9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the da entered because the affidavit or other evidence failed to overcome <u>all</u> rejections under appeal a showing a good and sufficient reasons why it is necessary and was not earlier presented. See	and/or appellant fails to provide a
10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry	
REQUEST FOR RECONSIDERATION/OTHER	
11. The request for reconsideration has been considered but does NOT place the application in considered but does not place the ap	
 Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper Notes Other: 	s)
F	Susan W Berman Primary Examiner Art Unit: 1711

Response to Proposed Amendment

The substitution of the definition of "polymer-bound" as set forth in the specification for the phrase "polymer-bound" in claim 1 clarifies the meaning of component "c" set forth in claim 1 and provides antecedent basis for the recitation of inorganic particles in claim 9. The proposed amendment does not clarify what is meant by the term "base" in claim 1 or the phrase "base unit" in claim 8.

Applicant discusses suitable "basic species" in paragraph [0056] to [0057], such as different species of amines. The word "base" is not considered to have the same meaning as the phrase "basic species", such as an amine that has basic properties. The phrase "encapsulated base covalently bonded to a solid organic polymer or inorganic particles" as set forth in claim 1 encompasses (1) an encapsulated base of any known composition which "encapsulated base" is covalently bonded to...particles (2) a polymer based particle or an inorganic based particle which is encapsulated and (3) a component that is a basic species such as an amine covalently bonded to a polymer or to an inorganic particle and is encapsulated and (4) a component that is a basic species such as an amine that is encapsulated and covalently bonded to a polymer or to an inorganic particle. Claim 8 does not clarify the meaning of "encapsulated base" because B in the formula is defined as a "base unit" which fails to clearly define a "basic species", such as an amine that has basic properties.

Response to Arguments

Applicant argues that the encapsulated catalysts described by Spera et al either have no chemical bonding between the catalyst and the encapsulant or have ionic bonding between a nitrogen-containing catalyst and a microgel. This argument is not persuasive because the instant claims do not require covalent bonding between the encapsulant and the base that is covalently bonded to a polymeric or inorganic particle. The claims, as written, can be interpreted to set forth either a base covalently bonded to a solid organic polymer or inorganic particle that is encapsulated or an encapsulated base that is

Art Unit: 1711

covalently bonded to a solid organic polymer or inorganic particle. Spera et al disclose both catalysts that are not compounds not covalently bonded to a polymer or inorganic particle and catalysts that are covalently bonded to a polymer. Adducts of imidazoles with a bisphenol epoxy resin are taught in [0027]. An adduct of a polyamine with an epoxy resin in taught in [0028]. Phenolic curing agents that are bisphenol A endcapped with a diglycidyl ether of bisphenol A and phenol- or cresol-novolac curing agents are taught in [0029]. Each of these catalysts comprises an amine covalently bonded to an organic polymer. Spera et al further teach encapsulating the disclosed catalysts in [0037]. Spera et al teach that any of the disclosed amine-containing catalysts, including the covalently bonded catalysts discussed herein above, can be encapsulated in a microgel.

Applicant asserts that the onium salts comprising phosphorus, arsenic or nitrogen disclosed by Spera et al do not function as onium photoinitiators such as iodonium or sulfonium salt photoinitiators. However, applicant has not provided any evidence to support this assertion. Crivello (4,069,055) teaches Group V onium salts, including phosphonium borates, useful as photoinitiators for epoxy resins.

Applicant's arguments concerning the disclosure of Lamon et al are unpersuasive for the following reasons. Applicant claims a combination of a cationic photoinitiator and an "encapsulated base". Lamon et al teach using two or more of the disclosed catalysts in combination (column 13, lines 16-17, and lines 30-35). Furthermore, Lamon et al teach that preferred heat activated curatives exhibit latent thermal reactivity and are reactive at lower temperatures only after an activation step such as exposure to actinic radiation (column 13, lines 18-29). Thus, Lamon et al clearly teach the advantage of using radiation exposure with a latent thermal catalyst, thus suggesting combination of a cationic photoinitiator and a latent heat activated catalyst, such as an encapsulated catalyst.

Upon filing an Appeal, the indicated allowability of the subject matter of claims 11, 12, 16, 17, 19, 21 and 23 will be reconsidered in view of the disclosure of crystalline polymer imidazole used in the

Application/Control Number: 10/723,827 Page 4

Art Unit: 1711

Examples of Spera et al (see Table 1 and Table 3) and prior art that teaches side chain crystallizable

polymers.

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Susan W. Berman whose telephone number is 571 272 1067. The examiner can normally

be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James

Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished applications is available

through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

SB

3/9/06

Susan W Berman

Ausan Berma

Primary Examiner

Art Unit 1711